HEC

Domestic Dishwasher

SERVICE MANUAL

Models

HEC9AFM

HEC9AFMS

- **Features**

- **5 Programs: Intensive,Normal,Rinse,Glassware,Soak**
- **Super-Capacity for 9 settings**
- **45cm width**

Contents

1. Product Code illumination and Series introduction …….. …...3
2. Features…… ……3
3. Safety Precaution…… ……4
4. Net Dimension……...5
5. Installation and Accessory Parts…… ……. ..5
6. Parts and Functions…… …….. ……..... ..7
7. Program Diagram……..12
8. Maintenances Service and Trouble Shooting…… ……. 13
9. Circuit Diagram…… ……..…. . 19

1.Product Code Illumination and Series Introduction

Model Identification

DW 9 — □ □ □ □

A B C D E F

A: Abbreviation of dishwasher
B: Code name of Nominal capacity
C: Series of factory design
D: Freestanding/built –in/semi-built-in
E: Mechanical/Electronic
F: The second series of factory design code name described/outer side material

Examples:

HEC9AFM/HEC9AFMS

It represents automatic spraying mechanical freestanding dishwasher, the cavity capacity is 9 standard sets.

2.Features

2.1 5 Programs: Intensive,Normal,Rinse,Glassware,Soak

2.2 Super-Capacity for 9 settings

2.3 45cm width

3. Safety Precaution

NOTICE

Carefully read the instructions contained in this manual, as they provide important information which is essential to safe and proper installation, use and maintenance of the appliance.

This appliance complies with the following EEC directives:

- 73/23/EEC of 19/02/73 (Low Voltage) and subsequent modifications;

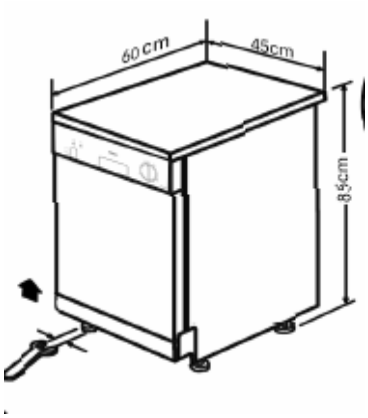
- 89/336/EEC of 03/05/89 (Electromagnetic Compatibility) and subsequent modifications.

- Carefully dispose of the packing material.
- After removing the packing, check to make sure that the appli-ance is not damaged. If in doubt, contact a qualified professional.
- The dishwasher must only be used by adults for the washing of household dishes and cooking utensils.
- Fundamental rules to follow when using the appliance:

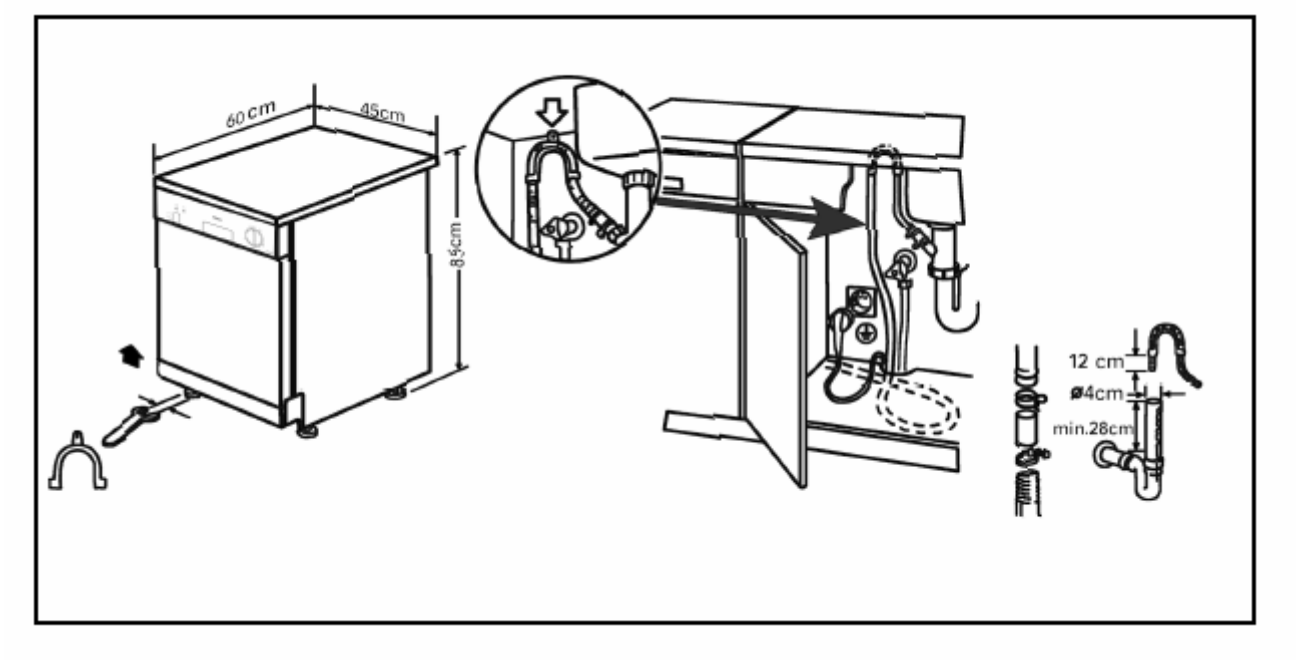
* Never touch the dishwasher when bare foot or with wet hands or feet;
* We discourage the use of extension cords and multiple sockets;
* During installation, the power supply cord must not be excessively or dangerously bent or flattened;
* If the appliance is not operating properly or maintenance must be performed, disconnect the appliance from the power supply.

- Keep detergents out of the reach of children, who must also be kept away from the dishwasher when it is open.
- This appliance cannot be installed outdoors, not even if the area in which it is installed is covered by a roof; it is also very dangerous to leave it exposed to the rain and elements.
- Do not touch the heating element during or after a wash cycle.
- Do not lean or sit on the door when it is open, as this could overturn the dishwasher.
- If the appliance malfunctions, turn off water supply to the appli-ance and disconnect the plug from the wall socket. Then, con-sult the section entitled, "Troubleshooting". If you can not solve the problem, contact a service centre.
- Only specialised personnel are authorised to make repairs.
- Appliances which are no longer being used must be made inoperable by cutting the power supply cord and removing the door lock.
- The appliance must be positioned so that the plug is accessible.or feet;
- The carpet must not obstruct the opening when the appliance in-stalling on the ground with carpet.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer orits service agent.

4.Net dimension



5.Installation and Accessory Parts



5.1 Positioning the Appliance

Position the appliance in the desired location. The back should rest against the wall behind it, and the sides, along the adjacent cabinets or wall. The dishwasher is equipped with water supply and drain hoses that can be positioned on the right or the left to facilitate proper installation.

5.2 Leveling the Appliance

Once the appliance is positioned, adjust the feet (screw them in or out) to level the dishwasher. In any case, the appliance should not be inclined more than 2° . If the appliance is level,it will help ensure proper performance.

5.3 Cold Water Connection

Connect the cold water supply hose to a threaded 3/4(gas) connector and make sure that it is fastened tightly in place (see Fig 1).If the water pipes are new or have not been used for an extended period of time,let the water run to make sure that the water is clear and free of impurities.If this precaution is not taken,there is a risk that the water inlet can get blocked and damage the appliance.

5.4 Hot Water Connection

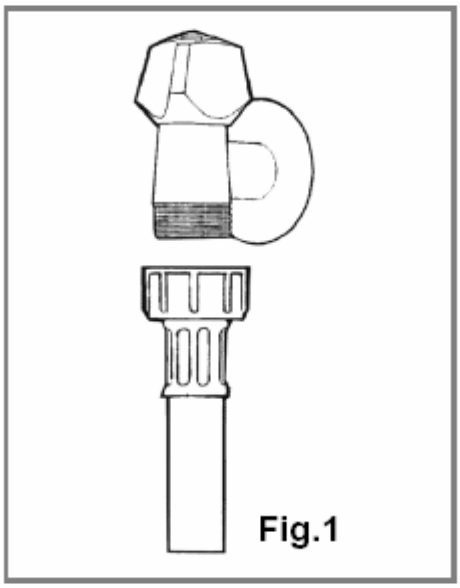


Fig.1

The water supply to the appliance can also be connected to the house's hot water line (centralised system, heating system), as long as it does not exceed a temperature of 60℃

In this case, the wash cycle time will be shortened by about 15 minutes and the wash efficiency slightly reduced.

The connection must be made to the hot water line following the same procedures as those for the connection to the cold water line.

Attention:

The special plastic hose support must be solidly fastened to the wall to prevent the drain hose from moving and allowing water to spill outside the drain.

Electrical Connection

After making sure that the voltage and frequency values for the current in the home correspond to those on the rating plate (located on the stainless steel inner door of the appliance) and that the electrical system is sized for the maximum voltage on the rating plate, insert the plug into an electrical socket which is earthed properly (the earthing of the appliance is a safety requirement mandated by law). If the electrical socket to which the appliance must be connected is not appropriate for the plug, replace the plug, rather than using adaptors or the like as they could cause overheating and burns.

5.5 Drain Hose Connection

Insert the drain hose into a drain pipe with a minimum diameter of 4cm,or let it run into the sink, making sure to avoid bending or crimping it. Use the special plastic support that comes with the appliance (see Fig.2). The free end of the hose must be at a height between 40 and 100 cm and must not be immersed in water.

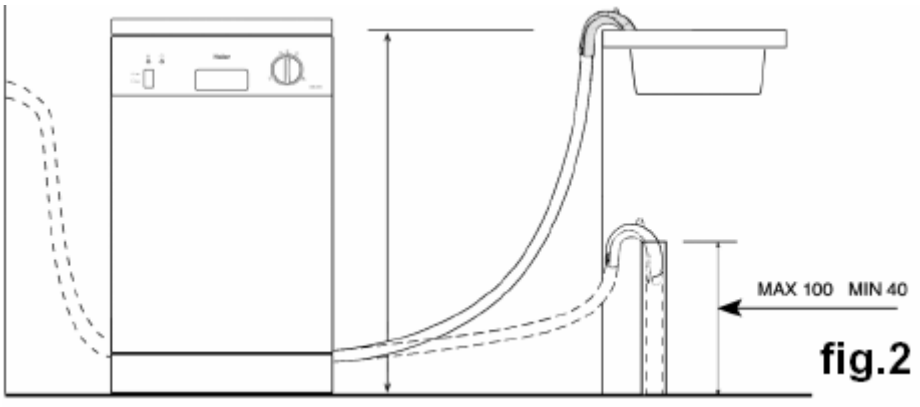
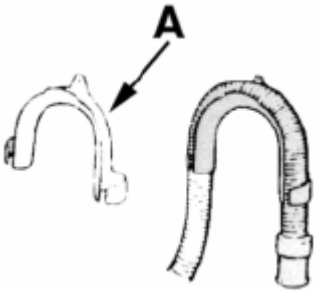
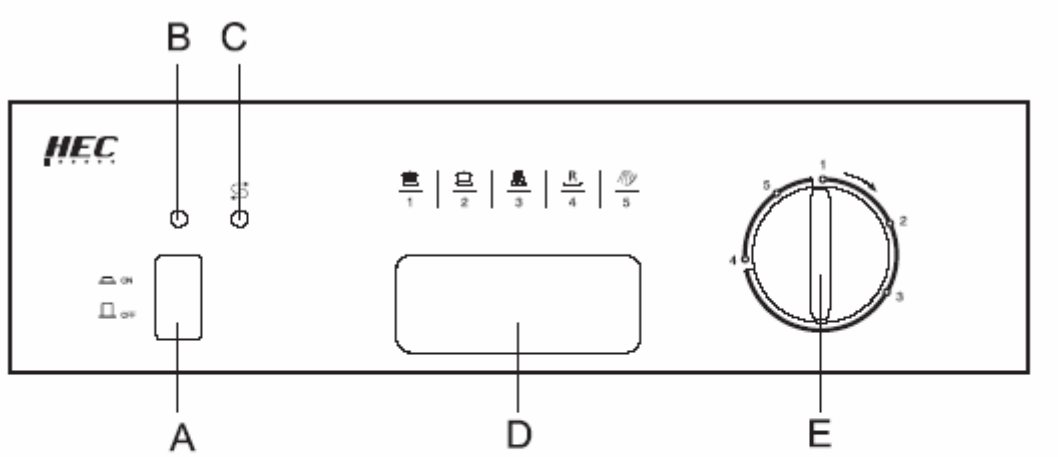


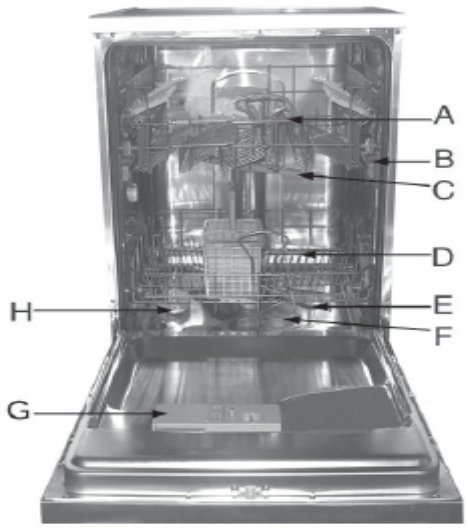
fig.2



6.Parts and Functions

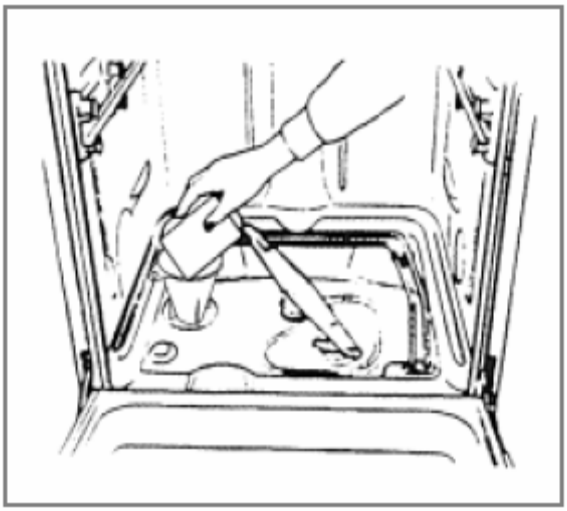


A "ON-OFF" Button
B "ON-OFF" Light
C Low Salt Indicator Light
D Handle For Opening Door
E Knob For Selecting Cycle



A Upper Rack
B Rack Height Adjustor
C Top Spray Arm
D Lower Rack
E Bottom Spray Arm
F Washing Filter
G Detergent and Rinse Aid Dispenser
H Salt Container Cap

Salt



The hardness of the water varies from place to place. If hard water is used in the dishwasher,deposits will form on the dishes utensils.

The appliance is equipped with a special softener that uses a salt specifically designed to eliminate lime and minerals from the water.

Loading the Salt into the Softener

Always use salt intended for use with dishwashers.

The salt container is located beneath the lower rack and should be filled as follows:

- Remove the lower rack and then unscrew and remove the cap from the salt container;
- If you are filling the container for the first time, fill it with water;
- Place the end of the funnel(supplied) into the hole and introduce about 2 kg of salt.It is normal for a small amount of water to come out of the salt container.
- Carefully screw the cap back on.

The salt container should be filled after about every 30 wash cycles.

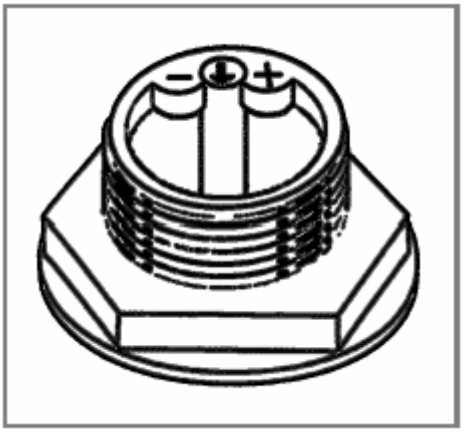
To prevent the formation of rust, load the salt just before beginning a wash cycle.

Adjusting Salt Consumption

The dishwasher is equipped with a system to adjust the level of salt consumption in function of the hardness of the water being used in order to optimize and customize the level of salt consumption while keeping it to a minimum.

To adjust salt consumption,proceed as follows:

- Unscrew the cap from the salt container;
- There is a ring on the container with an arrow on it (see figure to the side), If necessary, rotate the ring in the anticlockwise direction from the "-" setting towards the "+" sign,based on the hardness of the water being used.



It is recommended that adjustments be made in accordance with the following scheme:

Detergent

Detergent specifically intended for use with dishwashers must be used.The dispenser must be refilled before the start of each wash cycle following the instructions provided in the "Wash Cycle Table." The detergent dispenser is located on the inside panel the door.

Loading the detergent

To open the "A" cover on the dispenser,press the "B" button.The detergent for the wash cycle should be poured into the "C" compartment.

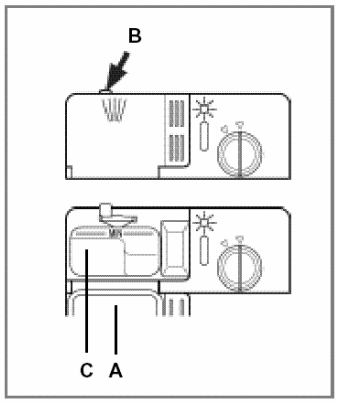
After the detergent has been placed in the dispenser, close the cover and press down until it clicks in place.

Notice:To facilitate closing the cover, remove any e

xcess detergent on the edges of the dispenser.

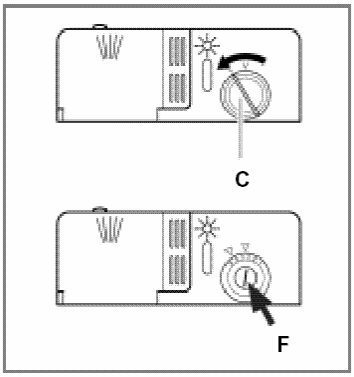
Rinse Aid

This product makes dishes sparkle and helps them to dry without spotting.The dispenser is located on the inside panel of the door and should be filled after every 80 wash cycle (or when the rinse aid indicator light comes on for those models with this feature).



The Rinse Aid

To open the dispenser,turn the "C" cap in the anti-clockwise dierction and then pour in the rinse aid,making sure not to overfill.The amount of rinse aid used for each cycle can be regulated by turning the "F" dose adjustor ,located beneath the "C" cap, with a screwdriver.There are 6 different settings; the normal dosage setting is 3.



Important

Proper dosage of the rinse aid improves drying.

If drops of water remain on the dishes or spotting occurs,the dosage adjustor should be turned to a higher setting.

If the dishes have white streaks,turn the dosage adjustor to a lower setting.

Notice:

The usage of 3 in 1 or similar tablets is forbidden when Rinse, Rapid Wash and Soak programmes are selected.

How to use the lower rack

We recommend that you place the most difficult to clean items on the bottom rack: pots, pans, lids, serving dishes and bowls, as shown in the figure to the right.

It is preferable to place serving dishes and lids on the sides of the racks in order to avoid blocking the rotation of the top spray arm.

- Pots, serving bowls, etc. must always be placed face down (see fig.D) .
- Deep pots should be slanted to allow the water to flow out.
- The silverware basket can not be doubled (see fig.E).

Normal daily load

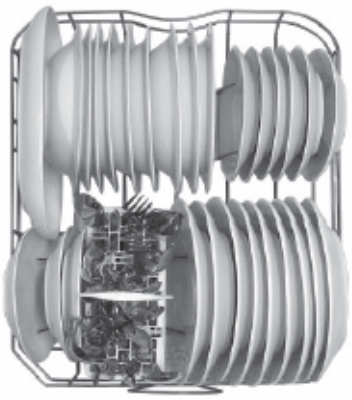


fig.D

fig.E

How to use the upper rack

The upper rack is designed to hold more delicate and lighter dishware, such as glasses, cups and saucers, plates, small bowls and shallow pans (as long as they are not too dirty).

- Position the dishes and cookware so that they do not get moved by the spray of water.
- The upper rack can be adjusted for height by using the knobs located on both sides of the rack itself (see fig.F).

Adjust the upper basket to the higher level and you have more space to accommodate those taller pans and trays in the bottom basket.

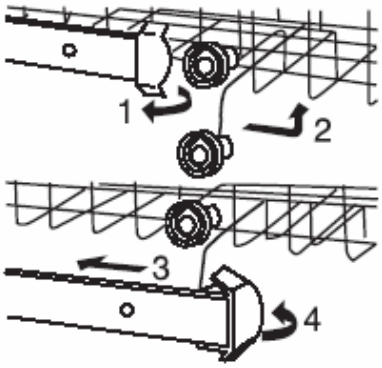


fig.F

Shelf

Lean tall glasses and those with long stems against the shelf-not against other items to be washed.

Place glasses, cups and small bowls on the additional cup rack. The additional cup rack can be swivelled in or out as required (see fig.G).

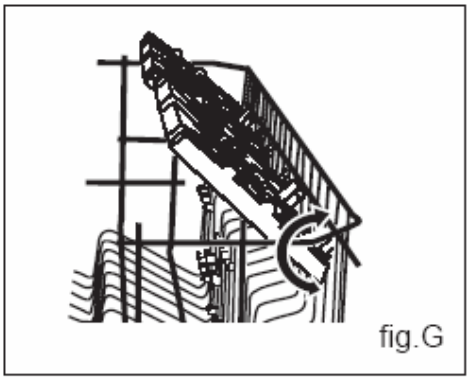


fig.G

Knife rack

The knife rack clips onto the side of the top basket, giving you the freedom to wash your large sharp knives separately and out of harm's way (see fig.H).

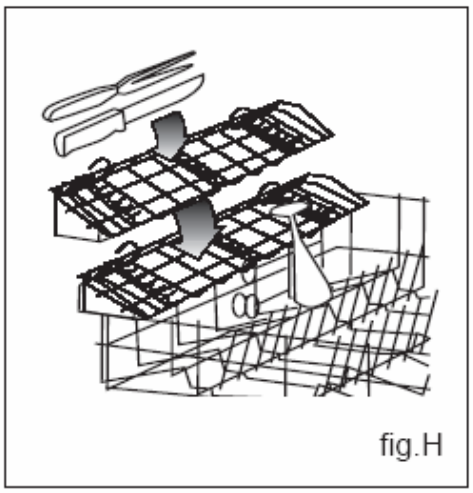


fig.H

7. Program Diagram

Cycle	Cycle Selection Information	Description of cycle	Detergent	Rinse Aid
Heavy Duty	Very dirty dishes,pots and pans(not to be used with delicate items).	Pre-wash with hot water. Extended wash at 55°C. Rinse with cold water. Rinse with hot water. Drying.	30g	★
Normal Wash EN 50242	Normally dirty dishes,pots and pans .Standard daily cycle.	Extended wash at 55°C. Rinse with cold water. Rinse with hot water. Drying.	25+5g	★(5)
Rinse	For dishes that need to be rinsed and dried only.	Rinse with cold water. Rinse with hot water. Drying.		★
Rapid Wash	Economic,fast cycle to be used to on not very dirty dishes right after they are used. No drying cycle.	Short wash at 55°C. Cold rinse.	15g	
Soak	Pre-wash of dishes, pots and pans while waiting for the load to be complete after the subsequent meal.	Short cold wash to prevent food residue from drying on the dishes .		

8.Maintenances Services and Trouble Shooting

8.1 Maintenances Services

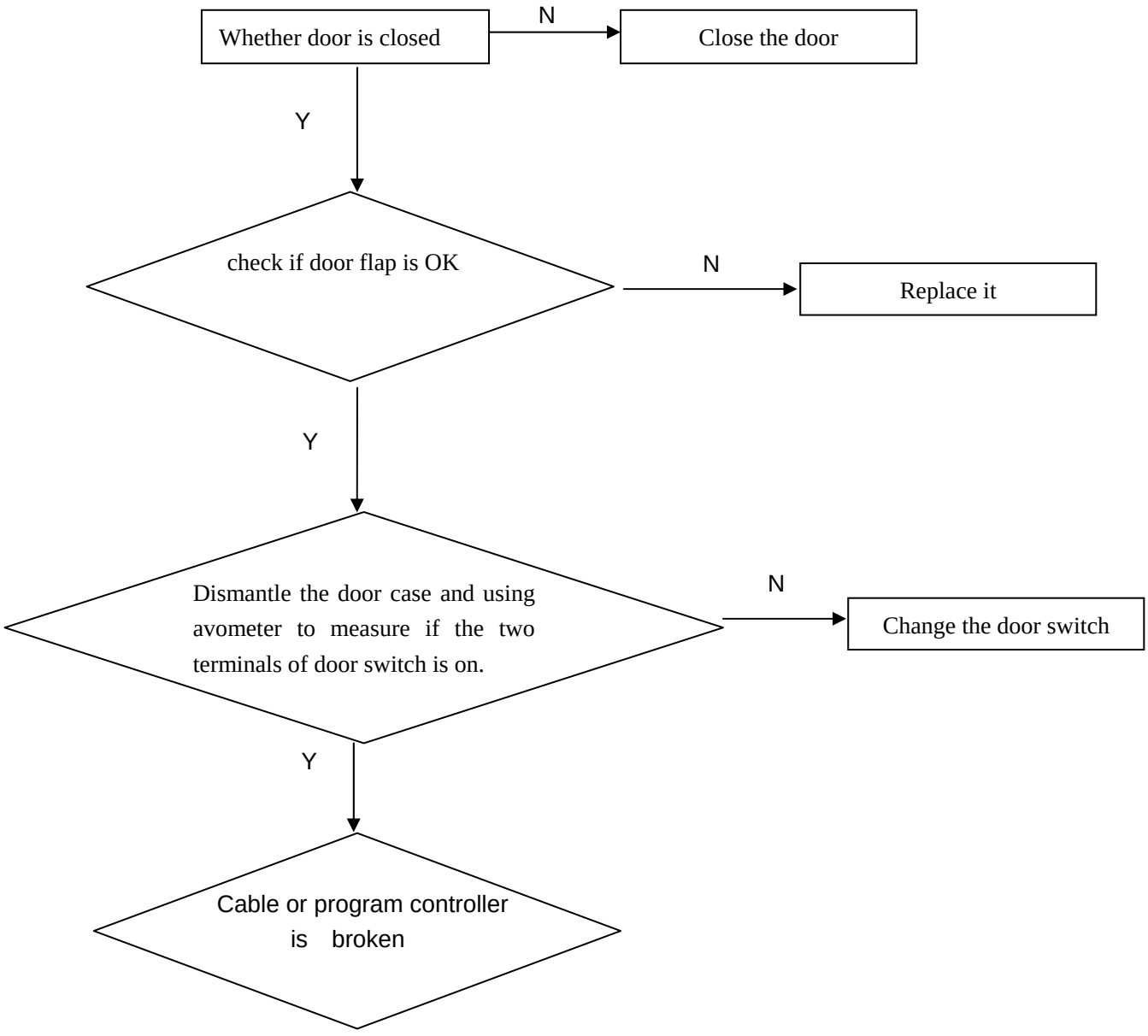
It may occur that the dishwasher does not function or does not function properly Before calling for assistance,let us see what can be done first:have you forgotten to press one of the buttons or to perfom an essential operation?

8.2 Trouble Shooting

analysis of the common breakdowns

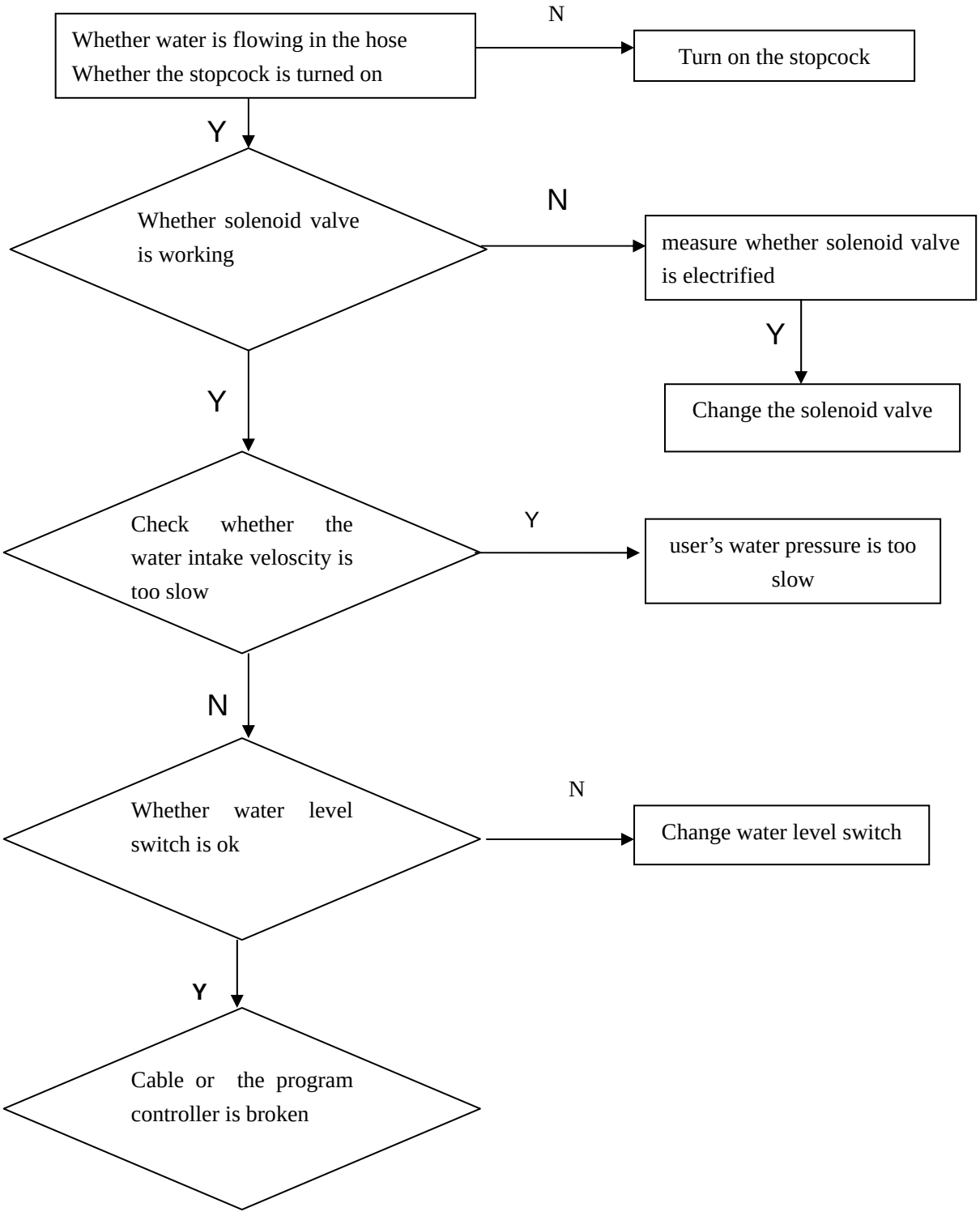
Door switch trouble

Phenomenon: the dishwasher does not work



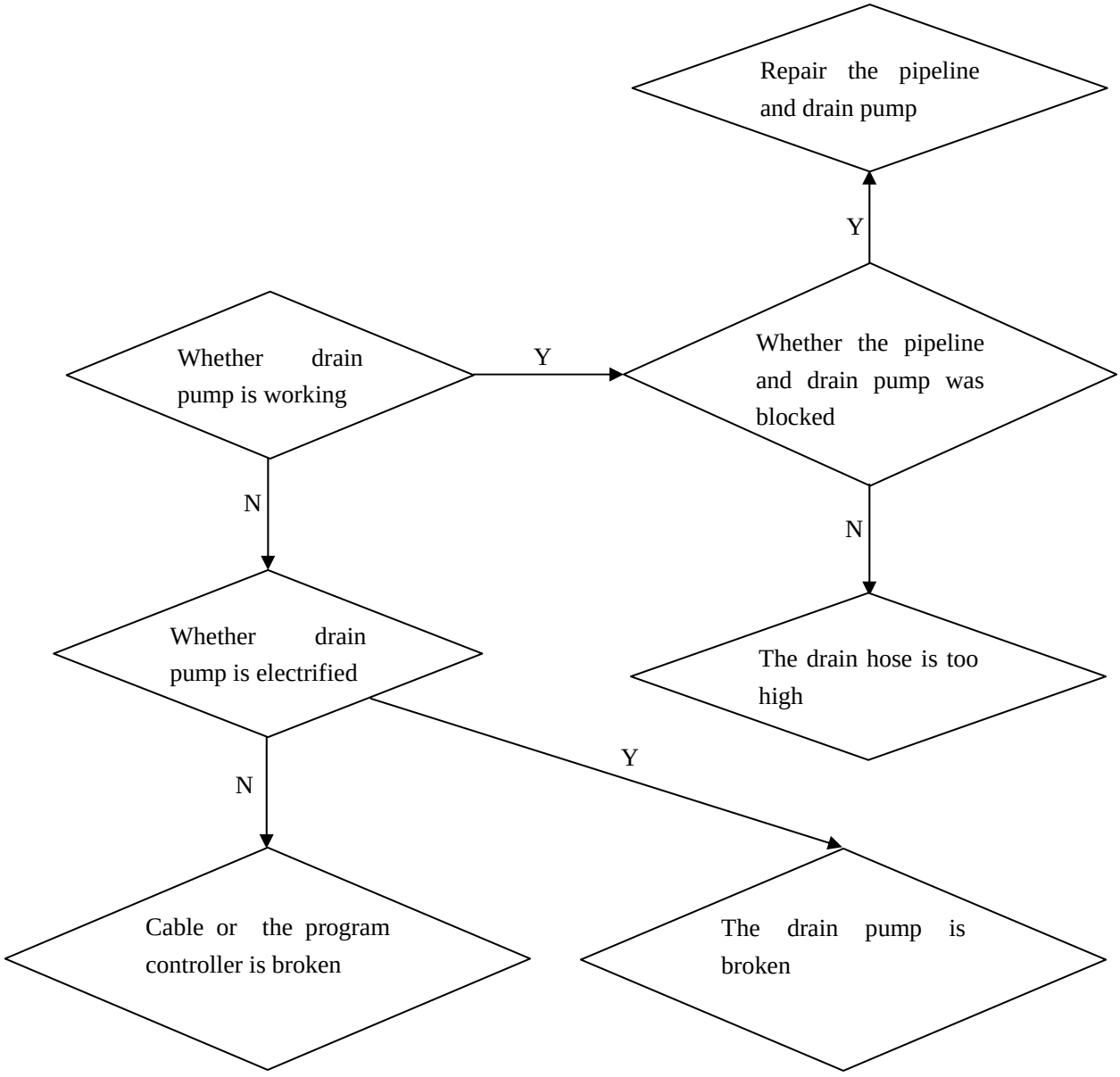
Water supply trouble

Phenomenon: water level cannot reach the required location



Drain pump trouble

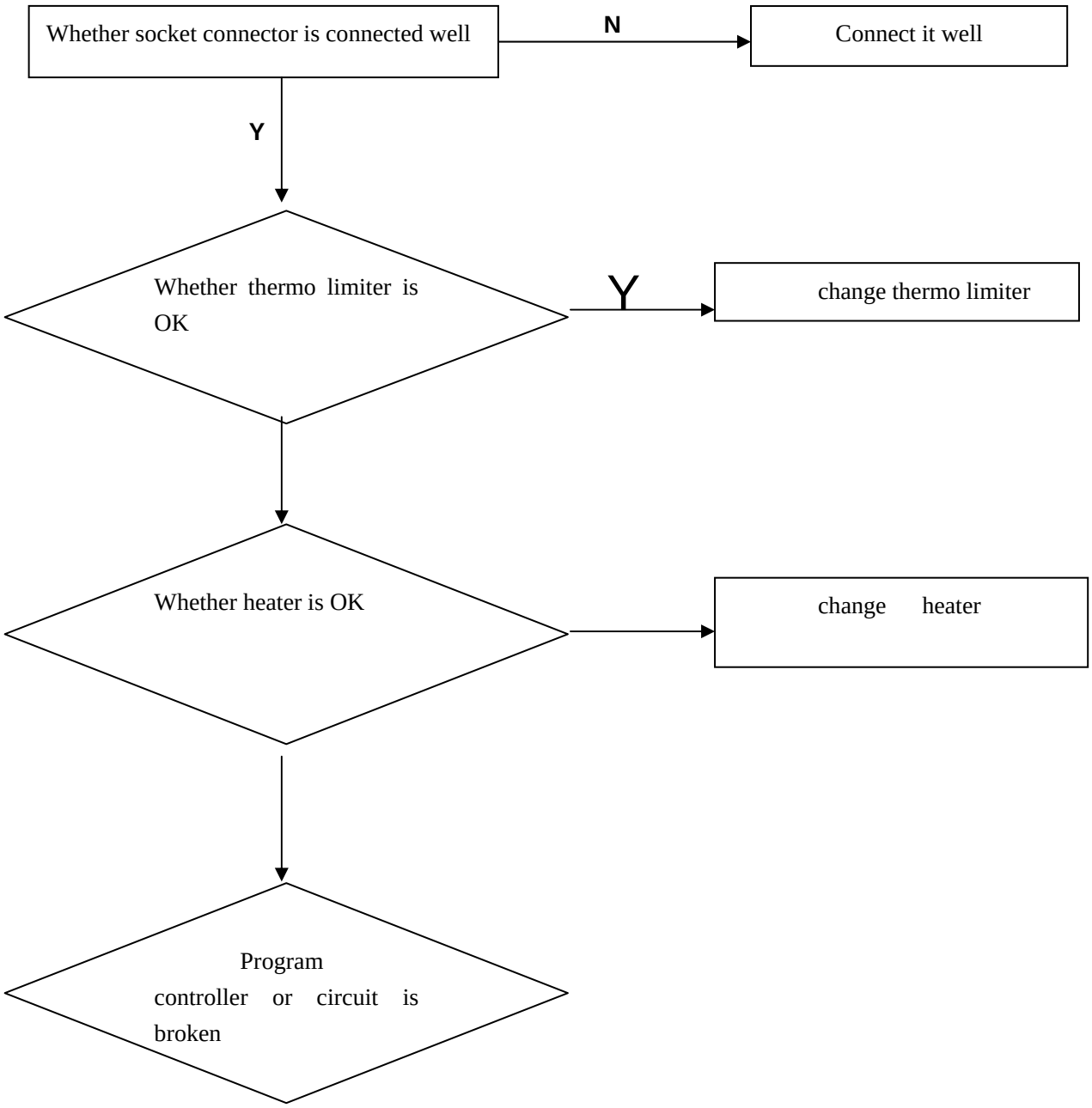
Phenomenon: water cannot be drained



Heating trouble

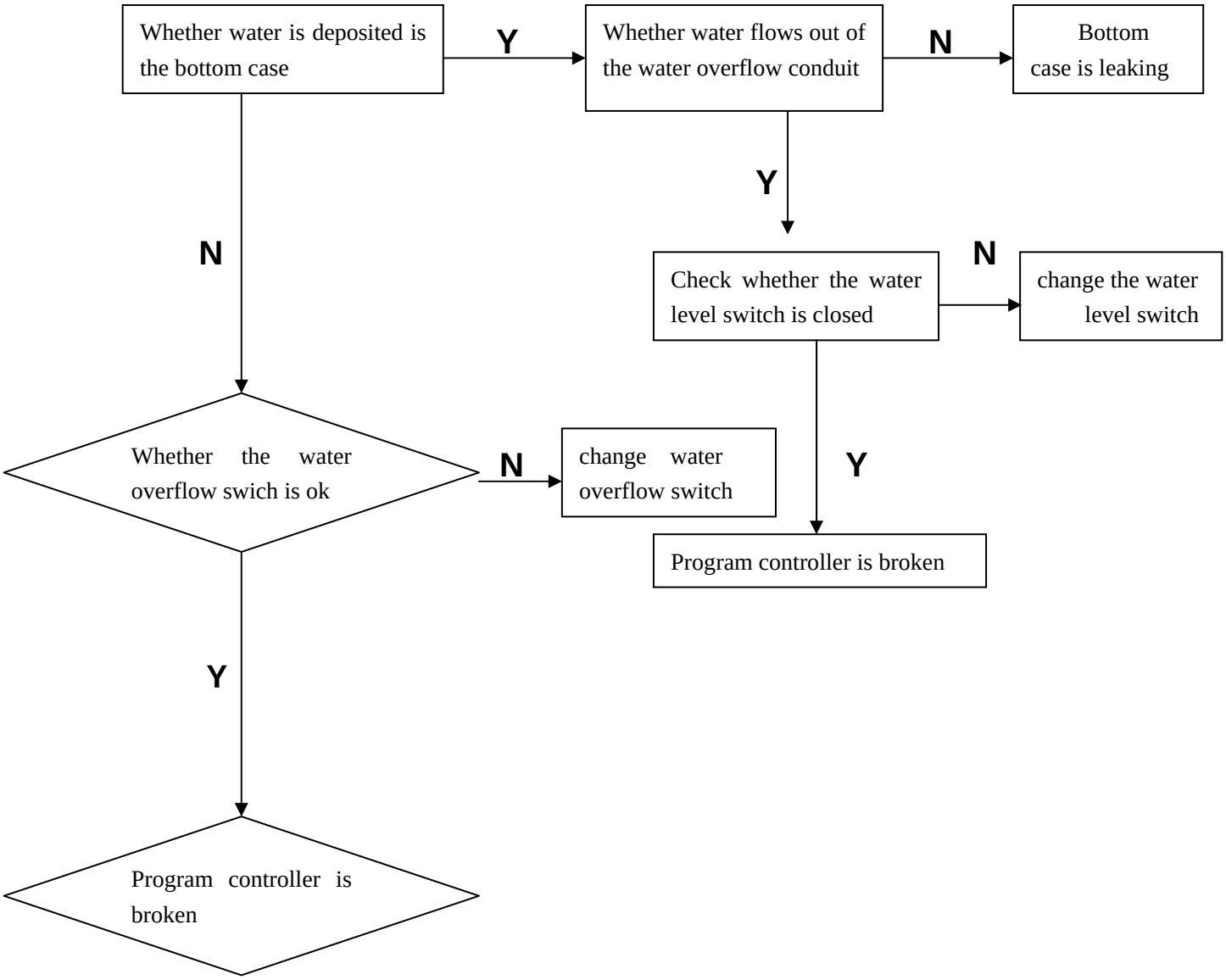
Phenomenon: program controller stop turnning

Check:



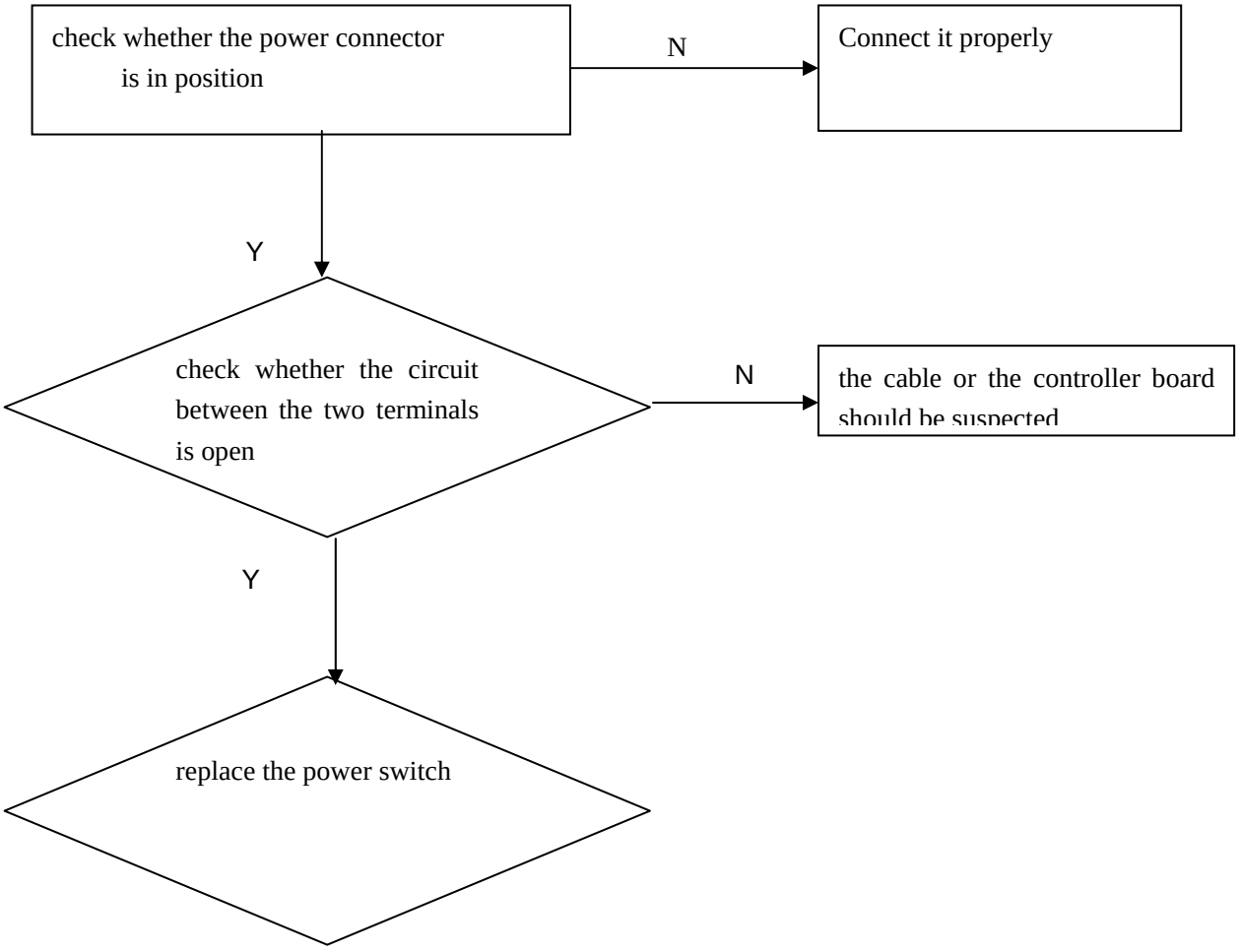
Water overflow trouble

Phenomenon: drain pump keep on working



Power supply trouble

Phenomenon: dashwaser cannot work


check whether the power connector is in position
N
Connect it properly
Y
check whether the circuit between the two terminals is open
N
the cable or the controller board should be suspected
Y
replace the power switch

9. Circuit Diagram